

BART Agreement Number: 6M8143

Approval Date: 10/30/2020

Work Plan: No. B.07-02 – Design of Access Platforms with Ladders and Stairway Egress for BART Richmond and Concord Control Towers

Scope:

2.0 SERVICES TO BE PERFORMED BY CONSULTANT AND WORK BREAKDOWN STRUCTURE

Task 1 – Interim Access - 90% Design Phase

- Engineer and Architect's Site visit to confirm existing conditions
- 90% Architectural Plans (Assumed 18 CAD drawings per tower)
 - a. Architectural Demolition Plan – Control Level (2)
 - b. East and North Elevation Demolition (2)
 - c. East and North Interior Elevation Demolition (2)
 - d. Demolition Photos (2)
 - e. Architectural Code Compliance Analysis (2)

- f. Architectural Floor Plan – Control Level (2)
 - g. Architectural Exterior East and North Elevation (2)
 - h. Architectural Interior East and North Elevation (2)
 - i. Architectural Details (2)
- 90% Structural Plans (Assumed 7 CAD drawings per tower)
 - a. Structural Notes and Special Inspections
 - b. Structural Standard Details (2)
 - c. East and North Access Platform Plans
 - d. East and North Access Platform Elevations/Sections
 - e. East and North Access Platform Details (2)
- Preparation of preliminary structural calculations
- 90% Design - Opinion of Probable Construction Cost (OPCC)
- 90% Internal QA/QC review

Task 2 – Interim Access - Issued for Bid/Permit/Construction (IFC) Phase

- Incorporate and Respond to BART 90% Comments
- IFC Architectural Plans (Assumed 18 CAD drawings per tower)
 - a. Architectural Demolition Plan – Control Level (2)
 - b. East and North Elevation Demolition (2)
 - c. East and North Interior Elevation Demolition (2)
 - d. Demolition Photos (2)
 - e. Architectural Code Compliance Analysis (2)
 - f. Architectural Floor Plan – Control Level (2)
 - g. Architectural Exterior East and North Elevation (2)
 - h. Architectural Interior East and North Elevation (2)
 - i. Architectural Details (2)
- IFC Structural Plans (Assumed 7 CAD drawings per tower)
 - a. Structural Notes and Special Inspections
 - b. Structural Standard Details (2)
 - c. East and North Access Platform Plans
 - d. East and North Access Platform Elevations/Sections
 - e. East and North Access Platform Details (2)
- Preparation of preliminary structural calculations
- IFC Design - Opinion of Probable Construction Cost (OPCC)
- IFC Internal QA/QC review

Task 3 – Interim Access - Engineering Services During Construction (ESDC)

- Review shop drawings – 16 included

- Respond to RFI's – 8 included
- Prepare Record Drawings
- Site visit – 2 included (1 per tower) by either Architect or Engineer

Task 4 – Permanent Egress Stair - 65% Design Phase

- Engineer and Architect's Site visit to confirm existing conditions
- Architectural Code review of Exits, Egress, Illumination, and Fire rating
- Architectural Code compliance/modification letter
- 65% Performance design of stair (Specification).
- 65% Architectural Plans (Assumed 6 CAD drawings)
 - a. Code Compliance Letter
 - b. Code Compliance Plan
 - c. Architectural Plans and Notes
 - d. Architectural Elevations
 - e. Architectural Details
 - f. Architectural Schedules
- 65% Structural Plans (Assumed 3 CAD drawings)
 - a. Structural Plans and Notes
 - b. Structural Details
 - c. Structural Sections
- Preparation of preliminary structural calculations
- 65% Design - Opinion of Probable Construction Cost (OPCC)
- 65% Internal QA/QC review

Task 5 – Permanent Egress Stair - 100% Design Phase

- Incorporate and Respond to BART 65% Comments
 - 100% Performance design of stair (Specification).
 - 100% Architectural Plans (Assumed 6 CAD drawings)
 - a. Code Compliance Plan/Letter
 - b. Architectural Plans and Notes
 - c. Architectural Elevations
 - d. Architectural Sections
 - e. Architectural Details and Schedules
 - 100% Structural Plans (Assumed 2 CAD drawings)
 - a. Structural Plans and Notes
 - b. Structural Details and Sections
 - Preparation of 100% structural design calculations
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- 100% Design - Opinion of Probable Construction Cost (OPCC)
- 100% Internal QA/QC review

Task 6 – Permanent Egress Stair - Issued for Bid/Permit/Construction (IFC) Phase

- Incorporate and Respond to BART 100% Comments
- IFC Performance design of stair (Specification).
- IFC Architectural Plans (Assumed 6 CAD drawings)
 - a. Code Compliance Plan/Letter
 - b. Architectural Plans and Notes
 - c. Architectural Elevations
 - d. Architectural Sections
 - e. Architectural Details and Schedules
- IFC Structural Plans (Assumed 2 CAD drawings)
 - a. Structural Plans and Notes
 - b. Structural Details and Sections
- Final Structural Design Calculations
- IFC Design - Opinion of Probable Construction Cost (OPCC)
- IFC Internal QA/QC review

Task 7 – Permanent Egress Stair - Engineering Services During Construction (ESDC)

- Review shop drawings – 4 included
- Respond to RFI's – 4 included
- Prepare Record Drawings
- Site visit – 1 included by either Architect or Engineer

Assumptions:

- Seismic or Code retrofit of the existing building is not included.
- Access platform does not meet Code requirements for egress.
- Future egress stair will require modification of access platform to meet Code requirements for egress.
- Structural evaluation of the existing building for Code compliance is not included.
- All deliverables are in electronic PDF format.
- Only the IFC Drawings, and Calculations bear the stamp and signature of the Architect/Engineer of Record.
- Installation will be performed by BART personnel.
- Record drawings shall be prepared from Contractor's redline markups.

Prime: HDR

Subconsultants: None

Total Work Plan Value: \$ 343,918